

Dentron



Dear Fellow Amateur,

DenTron Radio has been known, from its beginnings, as the "American Dream" company in the Amateur Radio Business. In case you are not yet familiar with the DenTron story, I would like to take this opportunity to describe our history from humble beginnings in a suburban Cleveland basement to the highly competitive world of cancer research, specialized production of military and commercial equipment, and world-wide sales in the Amateur Radio Industry.

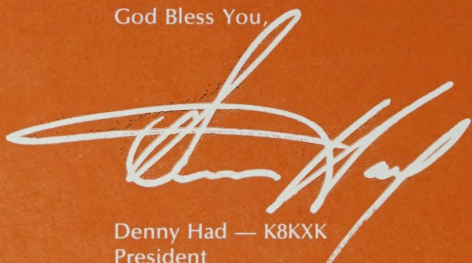
Since I was eleven years old I have been an active ham and always dreamed of owning my very own "toy factory." With an early business background in consumer electronics and further experience gained through the investment banking business, I put my faith and trust in the Lord and designed our first products, thus founding DenTron Radio.

One of the major goals of DenTron Radio is that all products be manufactured in the United States of America by American workers, with the same attention to detail and pride in workmanship that our pioneer fathers strived for. The long hours and hard work have been richly rewarded in customer loyalty, support, and enthusiasm for our products. It has been, and still is, so very gratifying to know that DenTron equipment has been a source of great pleasure to so many people.

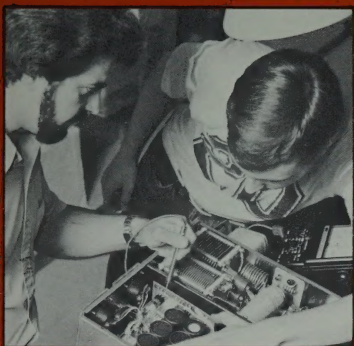
As this letter is written, DenTron is about to embark on the newest phase of its development — the manufacture of a quality, American-made HF transceiver for the amateur, military, and commercial markets. With the Lord's guidance and our customers' continued loyalty, I am confident that it will be one of the most sought-after products on the amateur market.

I would like to personally thank you for your interest in DenTron products, and I sincerely hope that you will get as much enjoyment as I have in using them. Be assured that, to us, our pride in design and workmanship maintains our reputation — and that means your satisfaction.

God Bless You,

A large, stylized handwritten signature in white ink, appearing to read "Denny Had". The signature is fluid and cursive, with a long horizontal stroke at the beginning and a sharp upward curve at the end.

Denny Had — K8KXX
President
DENTRON RADIO CO., INC.



AMPLIFIERS

MLA-2500

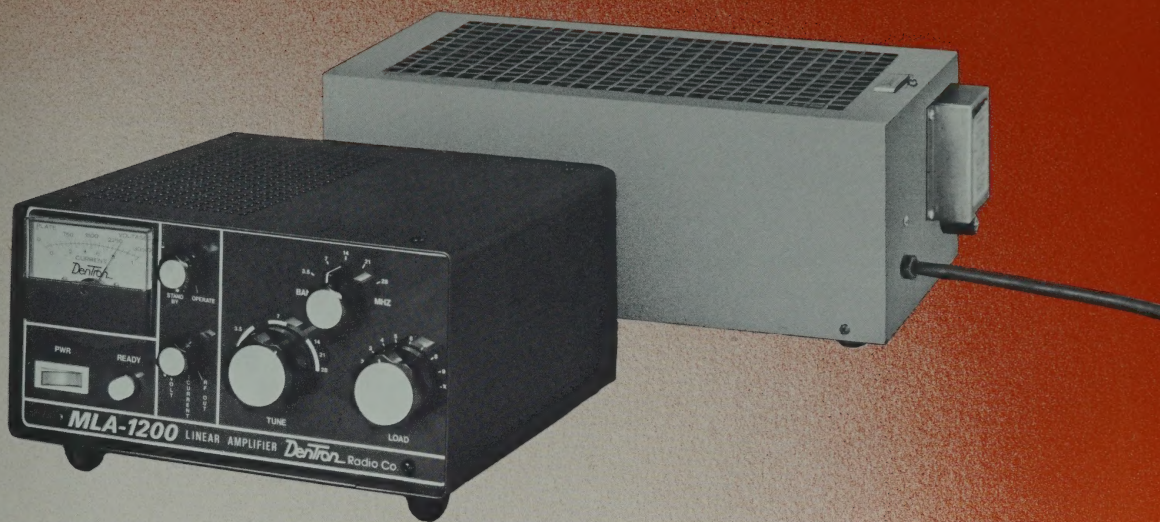


The MLA-2500

DenTron's product styling has always been strikingly individual. This is a result, not of a compulsion to be different, but of a dedication to excellence in American craftsmanship. This dedication now extends to one of the world's finest high-performance military amateur amplifiers, the MLA-2500. Individual styling however would not be fully appreciated without an exceptional power source. The heart of the MLA-2500 is a heavy-duty self-contained power supply. Compare the MLA-2500. It has the lowest profile of any high-performance amplifier in the world. Its modular construction makes it unique, and for the price it is an unprecedented value. Very few things in life are absolutely uncompromising. We are proud to count the DenTron MLA-2500 among them. So will you.

SPECIFICATIONS

- 160 thru 10 meters
- 2000+ watts PEP input on SSB
- 1000 watts DC input on CW, RTTY, or SSTV Continuous Duty
- Variable forced air cooling system
- Self contained continuous duty power supply
- Two EIMAC 8875 external-anode ceramic/ metal triodes operating in grounded grid.
- Covers MARS frequencies without modifications
- 50 ohm input and output impedance
- Harmonic Suppression better than 50 dB
- Built-in ALC
- Built in RF Wattmeter
- 117V or 234 V AC 50-60 hz
- Third order distortion down at least 30 dB
- Frequency Range: 1.8MHz (1.8-2.5) 3.5MHz (3.4-4.6) 7MHz (6.0-9.0) 14MHz (11.0-16.0) 21MHz (16.0-22.0) 28MHz (28.0-30.0)
- 40 watts drive for 1 KW DC input
- Rack mounting kit available (standard 19" rack)
- Size: 5 1/4" H x 14" W x 14" D
- Weight: 47 lbs.



The MLA-1200

The MLA-1200 is a compact KW designed to fill the gap between your barefoot transceiver or transmitter and a full power 2 KW amplifier. A single 8875 external-anode ceramic/metal triode, (the same revolutionary tubes that power the MLA-2500) yields 1200 Watts PEP SSB and 1000 Watts DC CW with as little as 70 Watts drive. (An automatic swamping circuit prevents damage to the final, if more than 100 Watts drive is applied to the MLA 1200.) There are scores of features common to both the MLA 1200 & the MLA-2500, like forced air cooling, all-steel chassis construction with tight fitting black wrinkle finish cabinetry, a plug-in PC board for metering, ALC, and mandatory warm-up timing. The MLA 1200 is the same size as our Super Tuner (just 10" W x 5¼" H x 10" D), and weighs only 10 pounds! Twin outboard power supplies are available for AC or DC operation, with the MLA-1200's low filament current drain characteristics allowing for standard 6 foot cabling between units. Both supplies are constructed of high quality, high current components, and are designed for a lifetime of trouble-free operation.

SPECIFICATIONS:

- MLA-1200
 - B+ 2250V DC
 - Filaments 6.3V AC
 - ALC 125V DC
 - Control 12V DC
 - Cooling Fan 110V AC
- AC-1200
 - 110V AC 15A
 - 220V AC 7.5A
- ALC output, external
- Keying, external
- Size: MLA-1200 5¼" x 10" x 10" weight 12½ lbs.
- AC-1200 7¼" x 5½" x 14½" weight 26 lbs.
- 80 thru 10 meters
- 1200 Watts PEP input on SSB
- 1000 Watts DC input on CW, RTTY, or SSTV
- Forced Air Cooling System
- AC or DC Outboard Power Supplies (AC-1200, DC-1200), or homebrew power supply (contact DenTron for construction details.)
- EIMAC 8875 external-anode ceramic metal triode operating in grounded grid
- Maximum Drive Input (exciter) 150 Watts
- Third order distortion down at least 30 db
- Harmonic attenuation exceeds FCC RM#20777 (40 db min.), tests as high as 65 db, depending on exciter used.

TUNERS

160 S-10AT Super Tuner



160-10AT SUPER TUNER

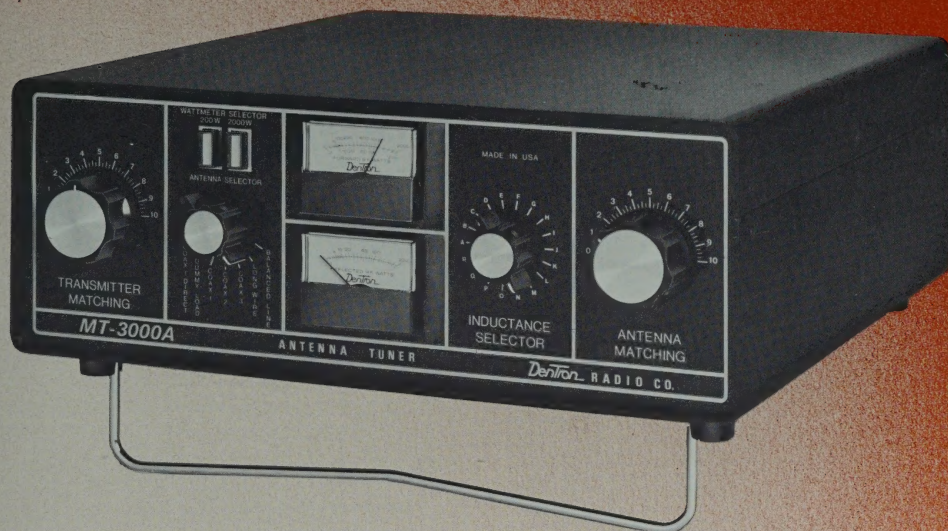
The only Tuner for 160-10 meters that will accept all feed lines at 500 watts DC — 1 KW PEP

DenTron's 160-10AT is a standard other tuners are measured by. It will match virtually anything from random wires, to balanced feeders, to coax lines, and at a price that won't squeeze your pocketbook. Thousands of these tuners are in service around the world in medical research, marine radio, nuclear fission experimentation, military service, FAA ground station installations, and of course, in Ham Shacks everywhere. The 160-10AT is compatible with any transmitter or transceiver on the market today, and can handle linear amplifiers up to 1200 Watts PEP (500 Watts continuous). The Super Tuner features a built-in heavy-duty 2-core balun, continuous tuning from 1.8-30 MHz, harmonic attenuation, capacitor spacing of 3000 volts, and a twelve position tapped inductor constructed of #12 gauge wire. The Super Tuner is built to last, with quality construction throughout — and years of proven service.

SPECIFICATIONS:

- Extra Heavy Duty Ceramic Inductor Switch
- Continuous Tuning 1.8-30 MHz
- Tunes unbalanced coax, random wire, or balanced feeders

- Handles 500W Continuous, 1200W PEP
- 3000V Capacitor spacing
- Black wrinkle finish
- Compact — 10" x 5 1/4" x 10"
- Weight: 12 pounds



The MT-3000A

Years of designing and manufacturing fine antenna tuners has led DenTron Radio to the "ultimate tuner", the MT-3000A. Featuring the same reliability and value of our other tuners, the MT-3000A does more than tune coax, random wire, and balanced feed systems. There is a built-in antenna selector switch for selecting five different antennas — three coax lines, balanced feed, and random wire. A coax direct position allows direct feed of a designated coax antenna. Plus another position lets you tune your station off-air, through a 250 Watt dummy load. The dummy load is fused to prevent damage due to excessive power, of course. Dual in-line forward and reflected watt meters provide continuous monitoring of both power output and antenna tuning. The Wattmeter system of the new MT-3000A is switchable between 200 and 2000 Watts, using dual color-keyed push button switches. The MT-3000A offers continuous tuning from 160 through 10 meters, with power handling capability in excess of 3 KW PEP. And our newest tuner is styled to match our MLA-2500 linear amplifier, the no compromise favorite of Amateurs everywhere. All this, plus the pride of American craftsmanship and ingenuity that's built into every DenTron product.

SPECIFICATIONS:

- Power handling capability in excess of 3 KW PEP
- Front Panel Antenna Switch with 5 Antenna Inputs plus Tuner bypass position
- Built-in 50 Ohm - 250 Watt dummy load
- Dual Wattmeters
- Compact: 5¼" x 14" x 14", 18 pounds
- Continuous Tuning 160-10 meters
- 3 Core Heavy-Duty Balun

TUNERS

80-10AT



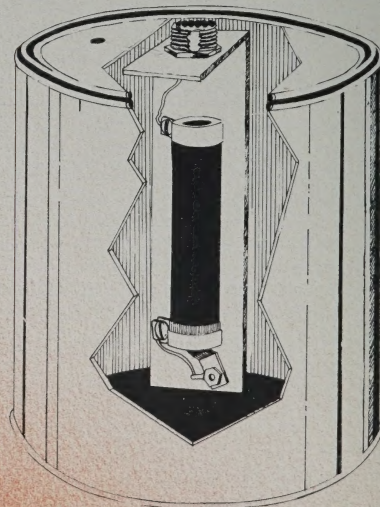
80-10AT TUNER

Here's an antenna tuner for 80 through 10 meters, which handles 500 Watts PEP and matches your 52 ohm transceiver to a random wire antenna. The ideal tuner for the Ham on the move.

- Random wire tuner
- 3000 volt capacitor spacing
- Tapped inductor
- Ceramic antenna feed thru
- 7" W. 5" H. 8" D., Weight: 5 pounds.

The BIG DUMMY

Until now dummy loads were either super expensive, or exasperating exercises in futility . . . since the search for suitable cooling oil often led to a dead end. Now there is an economical alternative . . . the new DenTron Big Dummy. A full 1 KW dummy load, the Big Dummy offers a flat SWR, full frequency coverage from 1.8 to 300 MHz, and high grade industrial cooling oil furnished with the unit . . . no more frustrating searches, or substitutions! What's more, the DenTron Big Dummy is built to last . . . it comes fully assembled and warrantied. So join the Big Dummy club, help cut the QRM factor, and no one will call you a big dummy again!



Specifications

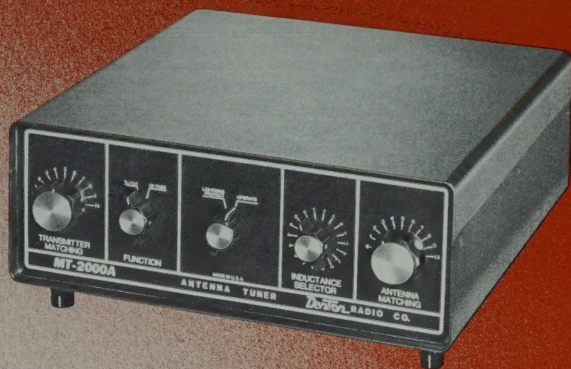
- Power Handling Capabilities:
 - 1 KW Continuous Carrier - 10 minutes
 - 2 KW PEP (SSB) - 20 minutes
- Duty Cycle: 50% (i.e. 10 minutes on - 10 minutes off)
- Cooling: 1 gallon, high quality, industrial grade, long life transformer oil
- Impedance: 50 ohms Non-Inductive
- VSWR: 0-300 MHz 1.05 to 1 or better
- Connector: Standard SO-239
- Container: 1 gallon capacity, vented
- Size: 7½" High x 6½" Diameter
- Weight: 8.5 lbs.
- Shipping: 10 lbs., complete with 1 gallon of transformer oil

The MT-2000A

In the same spirit as the revolutionary DenTron MT-3000A comes the new DenTron MT-2000A antenna tuner, an economical full power tuner designed to handle virtually any type of antenna, whether it be a vertical beam, quad, dipole, or long wire.

The sleek styling and low profile of the MT-2000A is certainly beautiful, but be assured that isn't all you're buying. The MT-2000A is designed and engineered using heavy duty all-metal cabinetry and high quality American components throughout.

When you consider the MT-2000A's unique features — front panel coax bypass switching, front panel lightning protection antenna grounding switch, 3 KW PEP handling capability and built-in 3 core balun for balanced feed line, we're sure you'll decide to buy American and stay with DenTron.



SPECIFICATIONS

- Continuous Tuning 1.8 to 30MHz
- Styled to match the MLA-2500 and upcoming DenTron Transceiver, Receivers, and Transmitters
- Front Panel grounding switch for your antenna system
- Front Panel bypass switching
- Antenna inputs: Coax unbalanced, SO-239
Random Wire, ceramic feedthru
Balanced line, two ceramic feedthrus,
tuned feeders 75-660 ohms
- 2 tapped inductors, #12 gauge wire & #8 gauge wire

- Handles a full 3KW PEP
- Transmatch Circuit: Tune out load reactance, transform load impedance to 50-75 ohms
- Built-in heavy duty 4 to 1 balun, 3 cores
- Harmonic attenuation
- Ceramic rotary switch 18 position, 12 amp capacity
- Capacitor Spacing 6000 Volt
- Low profile styling 5 1/4" x 14" x 14"
- Weight 16 lbs.

The Jr. MONITOR

Because you asked for it . . . we built it! The all-new JR. MONITOR™ Antenna Tuner.

Call it what you will — antenna tuner, transmatch, matchbox, or matching network, the JR. MONITOR™ has it all wrapped up in one neat 5 1/4" w. x 2 3/4" h. x 6" d. all metal cabinet.

With so many special features built in — think of the unlimited possibilities you'll have for experimenting with dozens of antennas! For instance, the DenTron All Band Doublet fed with balanced feed line hooked to the JR. MONITOR™ covers 1.8 - 30 MHz . . . or try this mobile suggestion: 108" mobile whip fed with coax to the JR. MONITOR™ located under the dash will give you 10 - 40 meter mobile coverage and no coils to change!

It's easy to understand the excitement the JR. MONITOR™ has created. Order the DenTron JR. MONITOR™ Antenna Tuner from your dealer today.

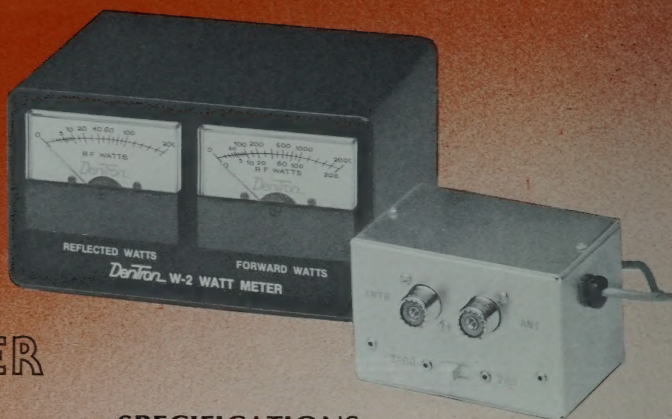


SPECIFICATIONS:

- Continuous tuning 1.8 - 30 MHz
- Forward reading relative output power meter
- 300 watt power capability
- Built-in encapsulated balun
- Mobile mounting bracket
- Ceramic Rotary Switch 12-position
- Capacitor spacing 1000 volts

- Tapped toroid inductor
- Antenna inputs:
 - a. Coax unbalanced SO 239
 - b. Random wire
 - c. Balanced feed line 75 - 660 ohm
- 5 1/4" w. x 2 3/4" h. x 6" d.
- All metal black wrinkle finish cabinet
- Weight: 2 1/2 pounds

the watt meter



The W-2 WATTMETER

Because constant switching and guesswork can take the fun out of being a ham, DenTron developed a Wattmeter that lets you read both forward and reflected Watts at the same time. By monitoring both forward and reflected Wattage simultaneously, you will add a dimension of perfection to your station that will make you wonder how you ever got along without it. Don't cut down on the fun of Ham Radio, get yourself a DenTron Wattmeter.

SPECIFICATIONS:

- Forward Watt scale - 2000 or 200
- Reflected Watt scale - 200 Watts
- Low insertion loss
- Frequency range: 1.8-30 MHz
- Meter accuracy $\pm 5\%$
- Sensor Box may be extended 4 ft.
- Has 2 SO-239 Connectors
- Sensor Box - 4" W. x 2½" H. x 2½" D.
- 7" W. x 3½" H. x 6" D.
- Weight 5 lbs.



The TRANSVERTER

160 meters is only a step away from 80 with this remarkable DenTron 160 meter transverter. Specifically designed to bring simple low cost 160 meter capability to any amateur station currently equipped for 80 meter CW, SSB, or AM operation. No modification of your existing equipment is required. Just "plug in and play" and you're on 160 meters with 100 Watts transmit power and a super sensitive receiver.

SPECIFICATIONS:

- Full 1.8 — 2.0 MHz coverage
- Receiver sensitivity .35 microvolts for 10 dB ratio
- 5 Watts of drive ample for full input
- Built in power supply for 110/50/60 Hz
- 6146B Final tube
- Matches 50 — 70 ohm antenna

- Input drive overload protection (swamping circuit)
- 3.8 to 4.0 MHz input (75 meter band) SSB, CW, AM
- Heavy steel construction of cabinet and chassis
- Printed circuit design
- Transverter — bypass control circuit
- W-12", H 6¼", D 10". Wt. 18 lbs.

ANTENNAS



SKYCLAW 160-40V

A tunable monoband high performance vertical antenna, designed for 40, 80 or 160 meter operation. SKYCLAW gives you the following spectrum coverage:

BAND (Meters)	BANDWIDTH (kHz)
160	50
80	200
40	entire band

Tuning is easy and reliable. Rugged construction assures that this 25 foot self-supporting unit is weatherproof and survives nicely in 100 mph winds. Handles full legal power limit.

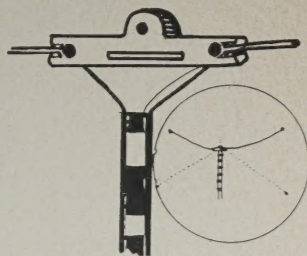
SKYMASTER 4V

A fully developed and tested 27 foot vertical antenna covers entire 10, 15, 20, and 40 meter bands using only one cleverly applied wave trap. A full $\frac{1}{4}$ wave antenna on 20 meters.

Constructed of heavy seamless aluminum with a factory tuned and sealed HQ Trap. SKYMASTER is weather-proof, withstands winds up to 80 mph, handles 2 KW power level and is for ground, roof, or tower mounting. Radials included.

80-4VR

Our 80 m resonator for top mounting on the SKYMASTER. It can be set anywhere in 75 to 80 meter band with 100 Khz band width.



ALL BAND DOUBLET

This All Band Doublet or inverted type antenna covers 160 thru 10 meters.

It has a total length of 130 feet (14 ga. stranded copper) although it may be made shorter if necessary. This tuned doublet is center fed through 100 feet of 470 ohm PVC covered balanced transmission line. The assembly is complete. Add rope to the ends and pull up into position. Tune with the DenTron Super Tuner and you're on 10 through 160 meters with one antenna!

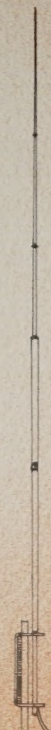
TRIM-TENNA TT-20

The antenna your neighbors will love. The new DenTron 20 meter Trim-Tenna beam is designed for the discriminating amateur who wants fantastic performance in an environmentally appealing beam. Up front there is a 16' driven element with precision Hy-Q coils fed directly with 52 ohm coax. And 7 feet behind is a 17' reflector element that provides up to 15 db front to back ratio. The Trim-Tenna mounts easily and what a difference in on-the-air performance between the Trim-Tenna and that dipole, long wire or inverted vee you've been using.

- 14 lbs.
- 8 $\frac{1}{2}$ ' Turning Radius
- 4 db forward gain over dipole
- 15 db front to back ratio
- 20 db front to side ratio

EX-1

The DenTron EX-1 Vertical Antenna is designed for the performance minded antenna experimenter. The EX-1 is a full 40 meter, $\frac{1}{4}$ wave, 33' self-supporting vertical. It's the ideal vertical for phasing, mechanically adjustable for 40-10 meters.



Dentron

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